

WHAT IS CLAIMED IS:

1. A device for reducing an internal lumen of a catheter so as to accommodate a guidewire having a diameter substantially smaller than said internal lumen comprising:

5 a longitudinal tubular adapter positionable within the internal lumen of said catheter, said adapter having an external diameter substantially equal to said internal lumen of said catheter and having a smaller internal lumen capable of accommodating said guidewire.

2. A device according to claim 1, wherein said adapter extends within said internal lumen of said catheter along the entire length of said catheter.

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3. A device according to claim 1, wherein said adapter extends beyond the length of said catheter.

15 4. A device according to claim 3, wherein a portion of said adapter extending beyond the length of said catheter includes a tapered tip.

5. A device according to claim 3, wherein said tapered tip is flexible.

20 6. A device according to claim 1, wherein said external diameter of said adapter is about 0.035 inches.

7. A device according to claim 1, wherein said internal lumen of said adapter includes an internal diameter of about 0.018 inches.

25 8. A device according to claim 1, wherein said adapter is constructed of a polymeric material.

9. A device according to claim 8, wherein said polymeric material is selected from the group consisting of polyethylene, polypropylene, polystyrene, polyester, polyurethane,

polyamide, and peboxes, and mixtures and combinations thereof.

10. A catheter system for use with a first guidewire having an external diameter and a second guidewire having an external diameter smaller than said first guidewire comprising:

5 a catheter including a lumen defining an internal diameter capable of accommodating said first guidewire, and

an adapter selectively positionable within said lumen of said catheter, said adapter including an external diameter substantially equal to said internal diameter of said lumen of said catheter, said adapter further including a lumen defining an internal diameter capable of
10 accommodating said second guidewire.

11. A catheter system according to claim 10, wherein said adapter is removably slidable within said lumen of said catheter.

15 12. A catheter system according to claim 11, wherein said adapter extends beyond the length of said catheter, said portion extending beyond said catheter being adjustable by slidably positioning said adapter within said lumen of said catheter.

20 13. A catheter system according to claim 12, wherein said portion of said adapter extending beyond the length of said catheter includes a flexible tapered tip.

14. A catheter system according to claim 10, wherein said catheter includes an expandable balloon portion.

25 15. A catheter system according to claim 10, wherein said catheter includes a radially expandable stent for transluminal implantation.

16. A catheter system according to claim 15, wherein said catheter includes an expandable balloon portion and said radially expandable stent is a balloon expandable stent positioned about

said expandable balloon portion.

17. A catheter system according to claim 16, further including a sheath extending about said catheter and covering said stent.

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18. A catheter system according to claim 10, wherein said lumen of said catheter is about 0.035 inches and said lumen of said adapter is about 0.018 inches.

19. A catheter system for reducing the internal diameter of a lumen of a catheter comprising:
10 a catheter including a lumen; and
an adapter slidably positioned within said lumen of said catheter and extending beyond the length of said catheter, said adapter having an outer diameter substantially equal to said lumen of said catheter and including a lumen smaller than said lumen of said catheter.

15 20. A catheter system as in claim 19, wherein said lumen of said catheter is about 0.035 inches and said lumen of said adapter is about 0.018 inches.

21. A catheter system including a kit of parts for use with a plurality of guidewires having different diameters comprising:

20 a catheter including a lumen defining an internal diameter, and
a plurality of adapters selectively positionable within said lumen of said catheter, each of said plurality of adapters including an external diameter substantially equal to said internal diameter of said lumen of said catheter, each of said plurality of adapters further including a lumen defining mutually distinct internal diameters capable of uniquely accommodating one of 25 said plurality of guidewires therethrough.

22. A catheter system according to claim 21, wherein each of said plurality of adapters are removably slid able within said lumen of said catheter.